Chapter 50

FLOODS*

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ARTICLE I. IN GENERAL

Secs. 50-1-50-25. Reserved.

ARTICLE II. FLOOD DAMAGE PREVENTION

DIVISION 1. GENERALLY

Sec. 50-26. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Additional (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

Area of special flood hazard is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area is designated as zone A on the FHBM, or zones A, AO, AH, A1-30, AE, A99, VO, or V1-30, VE, or V, on the FIRM.

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year.

Basement means the portion of a building having its floor subgrade (below ground level) on all sides.

Building means any structure built for support, shelter, or enclosure for any occupancy or storage.

Development means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials or equipment.

FEMA means the Federal Emergency Management Agency. The region IV office refers to the regional office in Atlanta, Georgia.

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters.
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood hazard boundary map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the approximate boundaries of the areas of special flood hazard have been delineated and defined as zone A.

Flood insurance rate map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study is the official report provided by the Federal Emergency Management Agency following detailed engineering study of the flood hazards in a community. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

Floodproofing means designing or altering a nonresidential structure to render the structure, and attendant utility and sanitary facilities, watertight, with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. See FEMA Technical Bulletin 3-93, and FEMA-102, Floodproofing Non-Residential Structures, and subsequent revisions thereto.

Flood-resistant materials means building materials which are capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage. The term "prolonged contact" means at least 72 hours, and the term "significant damage" means any damage requiring more than low-cost cosmetic repair (such as painting). See FEMA Technical Bulletin 2-93, and subsequent revisions thereto.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Floor means the top surface of an enclosed area in a building, including basement, i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

Functionally dependent facility means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a building. If fill has been placed, it refers to the original ground level beneath the fill.

Historic structure means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the national register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district;

- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior; or
 - b. Directly by the Secretary of the Interior in states without approved programs.

Letter of Map Amendment (LOMA) means a letter issued by FEMA amending the boundaries of the area of special flood hazard due to natural topographic conditions.

Letter of Map Revision (LOMR) means a letter issued by FEMA revising the boundaries of the area of special flood hazard and/or base flood elevations due to manmade development, channel alteration, or the development of detailed flood information.

Lowest floor means the floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is built in compliance with other applicable flood damage reduction standards.

Manufactured home means a building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this article, the term is synonymous with national geodetic vertical datum (NGVD).

National geodetic vertical datum (NGVD), as corrected in 1929, means a vertical control used as a reference for establishing varying elevations within the floodplain.

New construction means any structure for which the start of construction commenced after March 13, 1995, which is the effective date of the ordinance from which this article is derived or the original FIRM, whichever is earlier. The term also includes any subsequent improvements to such structure.

Recreational vehicle means a vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Reference elevation is five feet above the base flood elevation or historic flood level.

Retrofitting means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Start of construction includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building, including a manufactured home, on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other manmade facilities or infrastructures.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement means any combination of reconstruction, alteration, rehabilitation, additions, or improvements to a building (including electrical, plumbing, and heating/air conditioning), taking place during a five-year period in which the cumulative cost equals or exceeds 50 percent of the market value of the building. The market value of the building should be:

- The appraised value of the building prior to the start of the initial repair or improvement; or
- (2) In the case of damage, the value of the building prior to the damage occurring.

This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the code enforcement official, which have been cause for issuance of a citation or condemnation, and which are solely necessary to assure safe living conditions.

Variance means a grant of relief from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.

Violation means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificated is presumed to be in violation until such time as that documentation is provided.

(Ord. No. 95-3-13, § 21, 3-13-95)

Cross reference—Definitions generally, § 1-2.

Sec. 50-27. Lands to which this article applies.

This article shall apply to all areas of special flood hazard within the jurisdiction of the city.

(Ord. No. 95-3-13, § 1, 3-13-95)

Sec. 50-28. Basis for establishing areas of special flood hazard.

- (a) The areas of special flood hazard are those identified by the Federal Emergency Management Agency (FEMA) in its flood hazard boundary map or flood insurance study and flood insurance rate map, for the city, dated August 1, 1986, which with accompanying supporting data, and any revision thereto, including letters of map amendment or revision, are adopted by reference and declared to be a part of this article. The areas of special flood hazard also include those defined through standard engineering analysis for private developments or by governmental agencies, but which have not yet been incorporated in the FIRM. This includes detailed flood information generated as a requirement of section 50-79(4).
- (b) Upon annexation to the city, the areas of special flood hazard identified by the Federal Emergency Management Agency in its flood hazard boundary map or flood insurance study for unincorporated Haralson and Carroll Counties, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this article.

(Ord. No. 95-3-13, § 2, 3-13-95)

Sec. 50-29. Abrogation and greater restrictions.

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Ord. No. 95-3-13, § 16, 3-13-95)

Sec. 50-30. Interpretation.

In the interpretation and application of this article all provisions shall be:

(1) Considered as minimum requirements;

- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes. (Ord. No. 95-3-13, § 17, 3-13-95)

Sec. 50-31. Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes given the flood information available. This article shall not create liability on the part of the city or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder. (Ord. No. 95-3-13, § 18, 3-13-95)

Sec. 50-32. Severability.

If any section, subsection, sentence, clause, phase, or portion of this article is for any reason held or declared to be unconstitutional, invalid, or void, such holding or invalidity shall not affect the remaining portions of this article, and the unconstitutional, invalid or void provisions shall be deemed to have been severed herefrom, and the remainder of this article, after the exclusion of such part or parts, shall be deemed to be valid, as if such part or parts had not been included herein. If this article or any provisions of this article shall be held inapplicable to any person, group of persons, property, or kind of property, circumstances, or set of circumstances, such holding shall not effect the application of this article to any person, property or circumstances.

(Ord. No. 95-3-13, § 20, 3-13-95)

Sec. 50-33. Penalties for violation of article.

Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$300.00 or imprisoned for not more than 30 days, or both, and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing contained in this article shall prevent the city from taking such other lawful actions as are necessary to prevent or remedy any violation. (Ord. No. 95-3-13, § 19, 3-13-95)

Secs. 50-34-50-55. Reserved.

DIVISION 2. ADMINISTRATION

Sec. 50-56. Floodplain map interpretation and updating.

(a) Where there appears to be a conflict between the mapped boundary of the area of special flood hazard and actual field conditions, the local administrator shall make the necessary interpretation utilizing the most accurate topographic mapping or survey information

available. Where base flood elevations are available, they shall be used to delineate the boundary of the floodplain. This determination is for regulatory purposes only, and may result in either the exclusion or inclusive of lands within the area of special flood hazard. (Note: Property may not be excluded from the area of special flood hazard as a result of filling, unless a letter of map revision has been issued by FEMA.)

- (b) Where the local administrator has determined that all or a portion of a property is located outside of the area of special flood hazard, the applicant shall be advised of the need to obtain a letter of map amendment or revision from the FEMA region IV office and shall be given an application packet utilizing forms provided by FEMA. (Note: While the property may be exempt from the requirements of this article, flood insurance purchase will remain mandatory until FEMA issues a letter of map amendment or revision.)
- (c) The local administrator shall submit any newly available flood information to the FEMA region IV office within six months of receiving it. As a condition of project approval, the local administrator shall require an applicant to submit detailed base flood information developed pursuant to section 5-79(4) to the FEMA region IV office for a conditional letter of map revision utilizing forms provided by FEMA. The applicant shall then be required to submit as-built certifications to obtain a final letter of map revision.

 (Ord. No. 95-3-13, § 13, 3-13-95)

Sec. 50-57. Permits.

- (a) Requirements. A development permit shall be required within the areas of special flood hazard or other floodprone areas prior to the commencement of any development activities. (See definition of "development" in section 50-26.) No structure or land shall hereafter located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations.
- (b) Application. Application for a development permit shall be made to the Haralson County building department, hereinafter referred to as the local administrator, on forms furnished for that purpose, prior to any development activities, and may include, but not be limited to, the plans in duplicate drawn to scale showing: the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, proposed lowest floor elevation, earthen fill, storage of materials or equipment, drainage facilities; and description of the extent to which any watercourse will be altered or relocated as the result of proposed development. The development permit form shall include the following flood hazard information: map panel number; flood zone; established base flood elevation, if available, or historic flood level; and minimum lowest floor elevation, referencing either height above natural grade or an established base flood elevation or historic flood level.

 (Ord. No. 95-3-13, § 4, 3-13-95)

Sec. 50-58. Designation, duties of enforcement officer.

The local administrator shall be responsible for administration and enforcement of this article, and shall:

(1) Require development permits within the area of special flood hazard, and shall review each permit application to determine if the proposed development will be reasonably

- safe from flooding, and to assure that the requirements of this article have been satisfied.
- (2) Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.
- (3) If available, obtain, review, and utilize any reliable base flood elevation or historic flood level information available from a federal, state or other source, in order to administer this article. Base flood elevation information must be derived by standard engineering practices.
- (4) Obtain from the permittee an elevation certificate, prepared by a state licensed surveyor or engineer providing the actual elevation of the lowest floor, including basement, of all new or substantially improved buildings, in relation to both mean sea level and to highest adjacent natural grade. This shall occur at the time the lowest floor is established and shall be a condition for allowing further construction and for granting a certificate of occupancy or completion. For slab-on-grade foundations, the floor elevation shall be determined after the slab is poured and before wall construction commences. For wood-frame floor systems, the floor elevation shall be determined when the subflooring is in place, prior to any wall framing. (Note: In unnumbered A zones, when flood elevations do not exist, the local administrator may measure the distance from floor level to highest adjacent natural grade and complete the elevation certificate.)
- (5) Maintain all records pertaining to the provisions of this article. Such records shall be filed by legal description in the office of the local administrator and shall be open for public inspection.

(Ord. No. 95-3-13, § 5, 3-13-95)

Sec. 50-59. Watercourse alterations.

The local administrator shall notify adjacent communities, the state national flood insurance program coordinating office, Haralson County, and the regional planning agency, water management district or flood control district, as applicable, prior to permitting any alteration or relocation of a watercourse. A copy of the notice, the construction plans, the engineering hydraulic analysis, and the list of agencies contacted shall be submitted to the FEMA region IV office at the time the permit is issued. The Haralson County building department shall assure that the flood-carrying capacity of the watercourse is not diminished by the proposed alteration or relocation.

(Ord. No. 95-3-13, § 12, 3-13-95)

Sec. 50-60. Variances.

Variances to any of the provisions of this article shall be heard by the city zoning board pursuant to standard due process procedures. This board may also hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the

local administrator in the enforcement or administration of this article. Written findings shall be made addressing each of the relevant criteria and shall be mailed to the FEMA region IV office. Since the purpose of this article is to reduce future flood damages to lives and property, approval of variances is limited by the following:

- (1) Variances may only be granted for the following situations:
 - Substantial improvements to historic buildings (see definition of historic structures in section 50-26);
 - b. Functionally dependent water related uses;
 - c. Physical hardships pertaining to the topography, soils, geology, or configuration of a lot.
- (2) Variances for historic buildings shall be subject to the following determinations:
 - a. Submittal of documentation from the state historic preservation office, or federallycertified local historic preservation review board, that:
 - 1. The structure is historic as defined in this article;
 - 2. The proposed improvements will not preclude or reverse the listing or eligibility of the structure to be historic; and
 - 3. The proposed improvements are in keeping with the historic character and integrity of the building and neighborhood.
 - The variance is the minimum necessary to preserve the historic character and design of the structure; and
 - c. Every effort has been made to reduce future flood damages without impairing the historic character and design.
- (3) Variances for other than historic buildings shall be issued only upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - c. A determination that the granting of the variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;
 - d. A determination that the variance is the minimum necessary to afford relief; and
 - e. A determination that the project design includes all possible means for otherwise reducing future flood damages.
- (4) Variances shall not be issued to correct violations, after-the-fact.
- (5) Variances to reduce the floor elevation for new construction below the base flood elevation are eligible only on sites as described in subsection (1)c of this section.
- (6) Conditions to mitigate adverse impacts of the variance may be placed upon the granting of any variance.

- (7) Any applicant to whom a variance is granted shall sign a written acknowledgment specifying the difference between the base flood elevation and the elevation to which the building is to be built or substantially improved and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (8) The variance findings and conditions, together with the signed acknowledgement form shall be recorded in the county deed records, attached to a legal description of the affected property.
- (9) The local administrator shall maintain the records of all appeal actions and shall report any variances to the FEMA region IV office.

(Ord. No. 95-3-13, § 15, 3-13-95)

Secs. 50-61-50-75. Reserved.

DIVISION 3. FLOOD HAZARD REDUCTION

Sec. 50-76. Building standards-When flood elevations exist.

If base flood elevation information is available, or if historic flood records are higher at a particular site than three feet above highest adjacent grade, the following standards shall apply to reduce future flood damages. As used in this article, the reference elevation is five feet above the base flood elevation or historic flood level.

- (1) The lowest floor of all new construction and substantial improvements shall be elevated to or above the reference elevation, excepting that an attached garage is not required to be elevated above grade.
- (2) All new construction or substantial improvements shall be:
 - Designed or modified and adequately anchored to prevent flotation, collapse or lateral movement of the structure during a flood;
 - Constructed with materials and utility equipment resistant to flood damage for that portion of the structure below the reference elevation; and
 - c. Located and constructed by methods and practices that minimize flood damage.
- (3) Manufactured homes, whether new or replacement, shall be installed in conformance with all provisions of this section. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable building code requirements for resisting wind forces. The minimum elevation requirement is one of the following, as applicable:
 - a. The bottom of the chassis shall be elevated to or above the reference elevation;
 - b. If a manufactured home is located in a portion of a manufactured home park or subdivision which predates the effective date of the ordinance from which this article is derived or the original flood insurance rate map, whichever is earlier,

- it may instead be elevated such that the bottom of the chassis is at least three feet above average adjacent grade, supported by reinforced piers or other foundation systems of equivalent strength; or
- c. If a manufactured home has been substantially damaged by flood, when it is repaired or replaced, the chassis must be elevated to or above the reference elevation, regardless of location.
- (4) Electrical panels, switches, and outlets; heating, ventilation, and air conditioning equipment; plumbing fixtures, including bathrooms; hot water heaters; food freezers and refrigerators; laundry equipment; and other service facilities shall be elevated to or above the reference elevation or shall be protected to the same elevation to prevent water from entering the components during conditions of flooding.
- (5) Areas enclosed by solid walls below the elevated floor shall be provided with openings to allow the area to flood so as to relieve hydrostatic pressure that might damage the walls and/or foundation system. A minimum of two openings shall be provided, one each in at least two exterior walls. The bottom of the openings shall not be higher than one foot above lowest adjacent grade. At least one square inch of opening shall be provided for each square foot of enclosed area below the elevated floor. The openings may be covered by screens and/or louvers that will open automatically to allow entry and exit of floodwaters. Openings shall be provided in any interior partitions to allow all of the enclosed area to flood.
- (6) Use of the area below the reference elevation shall be limited to parking, building access, and limited storage incidental to use of the structure. Laundries, bathrooms, family rooms, bedrooms, offices, and other living areas are not allowed. Any area enclosed by solid walls may not be heated or air conditioned. Interior partitions shall be the minimum necessary to provide security and separation from the parking area. Open areas may be screened or latticed.
- (7) Only food resistant materials shall be used to finish any enclosed area below the reference elevation. The word "finish" means doors, windows, construction materials, wall surfaces, and the floor. Electrical switches and outlets shall be the minimum number necessary for safety and shall be connected to a ground-fault interrupt circuit, fully separate from the circuits servicing the elevated living areas. Back-flow valves shall be installed on floor drains to prevent sewage back-flow during a flood.
- (8) Nonresidential structures may be floodproofed (see definitions) in lieu of elevating, to at least one foot above the reference elevation but no more than four feet above average adjacent grade. Such designs must be prepared by a registered professional engineer or architect, who must certify on FEMA Form 65-12 ("Floodproofing Certificate") the height to which a structure has been floodproofed and that the floodproofing has been designed and constructed in compliance with this article.

(Ord. No. 95-3-13, § 6, 3-13-95)

Sec. 50-77. Same-Areas without flood elevations.

The following provisions shall apply to new construction or substantial improvement of buildings and structures so as to reduce future flood damages:

- (1) All new construction and substantial improvements shall be:
 - a. Elevated such that the lowest floor is at least three feet above highest adjacent grade, excepting that an attached garage is not required to be elevated above grade;
 - Designed or modified and adequately anchored to prevent flotation, collapse or lateral movement of the structure during a flood;
 - Constructed with materials and utility equipment resistent to flood damage for that portion of the structure less than three feet above highest adjacent grade; and
 - d. Located and constructed by methods and practices that minimize flood damage.
- (2) Manufactured homes shall have the bottom of the chassis elevated at least three feet above the highest adjacent grade and shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable building code requirements for resisting wind forces.
- (3) Electrical panels, switches and outlets; heating, ventilation, and air conditioning equipment, including duct work; plumbing fixtures, including bathrooms; hot water heaters; food freezers and refrigerators; laundry equipment; and other service facilities shall be elevated at least three feet above highest adjacent grade or shall be protected to the same elevation to prevent water from entering the components during conditions of flooding.

(Ord. No. 95-3-13, § 7, 3-13-95)

Sec. 50-78. Same-Miscellaneous.

- (a) Requirements for additions, alterations, repairs or reconstruction. Any addition, alteration, repair, reconstruction or improvement to a building which is in compliance with the provisions of this article shall meet the requirements of new construction.
- (b) Accessory structures. Structures that represent minimal investments, are not used for human habitation, and that are subordinate to and accessory to the primary structure or use on the property (e.g. storage sheds, detached garages, gazebos, and barns) need not meet the lowest floor elevation requirements of subsection 50-76(1) or 50-77(1) provided the other standards of section 50-76 or 50-77 are met. However, the applicant must sign a statement acknowledging that flood insurance rates will be significantly higher for structures that are not elevated in accordance with subsection 50-76(1) or 50-77(1). This statement shall be filed with the development permit.
- (c) Recreational vehicles. A recreational vehicle must either be fully licensed and ready for highway use and remain on the site for fewer than 180 consecutive days, or be installed as a

manufactured home in accordance with section 50-76 or 50-77. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.

(d) *Historic buildings*. Historic buildings, as defined in section 50-26, may be exempt from the elevation and other standards of this section, subject to approval of a variance pursuant to subsection 50-60(2).

(Ord. No. 95-3-13, § 8, 3-13-95)

Sec. 50-79. Standards for subdivision proposals and other large developments.

Proposals for subdivisions and other large developments, including shopping centers, industrial parks and complexes, public facilities and manufactured home parks and subdivisions, shall:

- (1) Be designed and located so as to minimize future flood damages both on-site and on lands upstream and downstream of the site;
- (2) Have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- (3) Have adequate drainage provided to reduce exposure to flood hazards;
- (4) Have base flood elevation data developed in accordance with standard engineering practice, when the development is greater in size than 50 lots or five acres. Such data shall be provided by the local administrator to the FEMA region IV office within six months, or the applicant shall submit the data to the office for a letter of map revision;
- (5) Have the base flood boundary and the base flood elevation for the building site on each lot clearly marked on all recorded subdivision plats and approved site development plans.

(Ord. No. 95-3-13, § 10, 3-13-95)

Sec. 50-80. Water and sewer systems.

In areas of special flood hazard the following provisions are required for the installation or reconstruction of water and sewer systems:

- New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (2) New and replacement sanitary sewage system shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;
- (3) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding. Back-flow valves are required. (Ord. No. 95-3-13, § 14, 3-13-95)

Sec. 50-81. Setbacks from streams and lakes.

- (a) No encroachments, including fill material or structures, shall be located within a distance of the street bank equal to two times the width of the stream at the top of bank or 20 feet each side from top of bank, whichever is greater. Buildings must be set back at least 20 feet from the normal highwater shoreline of a lake.
 - (b) Buildings shall not be permitted partially or wholly over water.
- (c) If a floodway has been designated in conjunction with base flood elevation data for a stream, no encroachment shall be allowed in the floodway unless a licensed professional engineer has scientifically evaluated the potential effects of the encroachment and has determined that it will cause no increase (0.0000 foot) in the base flood elevation. Prior to issuance of a development permit, a no-rise certification containing relevant back-up data must be signed and sealed by the engineer and accepted by the local administrator. This certification must be filed with the development permit.

(Ord. No. 95-3-13, § 9, 3-13-95)

Sec. 50-82. Bridge and highway improvements.

- (a) If no base elevations exist, the agency proposing the bridge or highway improvement within an area of special flood hazard must generate base flood elevations utilizing standard engineering practice. The bridge or highway improvement must be designed to create no more than a one-foot rise in the base flood elevations. The base flood elevation information and the impact of the bridge or highway improvement on the base flood elevations must be provided to the local administrator and to the FEMA region IV office.
- (b) If base flood elevations exist, the bridge or highway improvement must be designed to create no more than a one-foot rise in base flood elevations. The impact of the encroachment must be determined and provided to the local administrator and the FEMA region IV office.
- (c) If a floodway has be designated, the bridge or highway improvement must be designed and certified in accordance with section 50-81(c).

 (Ord. No. 95-3-13, § 11, 3-13-95)